Issuance Date: June 21, 2002
Effective Date: July 1, 2002
Expiration Date: June 30, 2005
Modification Date: March 24, 2004

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
WASTE DISCHARGE PERMIT No. WA-000247-0

State of Washington
DEPARTMENT OF ECOLOGY
Northwest Regional Office
3190 – 160th Avenue SE
Bellevue, WA 98008-5452

In compliance with the provisions of
The State of Washington Water Pollution Control Law
Chapter 90.48 Revised Code of Washington
and
The Federal Water Pollution Control Act
(The Clean Water Act)
Title 33 United States Code, Section 1251 et seq.
authorizes

WESTFARM FOODS – LYNDEN PLANT

635 Elliott Avenue West

Seattle, WA 98119

Facility Location: 8424 Depot Road Lynden, WA 98264 Latitude: 48° 56' 52" N Longitude: 122° 27' 06" W	Receiving Water: Nooksack River (direct discharge) City of Lynden POTW (indirect discharge)
Water Body I.D. No.: WA-01-01-1010	Direct Discharge Location: Latitude: 48° 56' 16" N Longitude: 122° 27' 06" W
Industry Type: Powdered Milk Production	

to discharge wastewater in accordance with the special and general conditions that follow.

Kevin C. Fitzpatrick
Water Quality Section Manager
Northwest Regional Office
Washington State Department of Ecology

TABLE OF CONTENTS

GENERAL CONDITIONS

SUMMARY OF PERMIT REPORT SUBMITTALS

Refer to the Special and General Conditions of this permit for additional submittal requirements.

Permit Section	Submittal	Frequency	First Submittal Date
S2.C.	Annual Flow Measurement Device Certification	Annually	January 15, 2003
S3.	Discharge Monitoring Report (with City of Lynden spreadsheet)	Monthly	August 15, 2002
S4.A.	Operations and Maintenance Manual Update	Once per permit cycle	November 15, 2002
S4.A.	Additional Operation and Maintenance Manual Updates	As necessary	Within thirty (30) days of adoption of modifications
S6.C.	Solid Waste Plan Update	Once per permit cycle	November 15, 2002
S8.	Spill Plan Update	Once per permit cycle	November 15, 2002
S8.	Additional Spill Plan Updates	As necessary	Within thirty (30) days of adoption of modifications
S9.	Slug Discharge Control Plan Update	Once per permit cycle	November 15, 2002
S9.	Additional Slug Discharge Control Plan Updates	As necessary	Within thirty (30) days of adoption of modifications
S11.	Receiving Water and Effluent Study for Temperature Sampling and Quality Assurance Plan	Once per permit cycle	March 15, 2003
S11.	Receiving Water and Effluent Study for Temperature – Results of Study	1/permit cycle	March 15, 2005
S12.	Effluent Mixing Study for Temperature Plan of Study	1/permit cycle	October 15, 2003
S12.	Effluent Mixing Study for Temperature Results of Study	1/permit cycle	March 15, 2005
G1.	Notice of Change in Authorization	As necessary	Within thirty (30) days of change
G7.	Application for Permit Renewal	1/permit cycle	December 30, 2004

SPECIAL CONDITIONS

S1. DISCHARGE LIMITATIONS

All discharges and activities authorized by this permit shall be consistent with the terms and conditions of this permit. The discharge of any of the following flows or pollutants more frequently than, or at a concentration in excess of, that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

A. Effluent Limitations for Direct Discharge during October through May (Sample Point 001)

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized during the months of October through May to discharge non-contact cooling water and uncontaminated cow water at the permitted location to the Nooksack River subject to meeting the following limitations:

	EFFLUENT LIMITATIONS	**MONITORING REQUIREMENTS[d]**	
Parameter	**Maximum Daily [a]**	**Frequency**	**Sample Type[c]**
Flow, process (mgd)	1.0	Continuously	Metered
Temperature, degrees Fahr.[c]	86	Continuously [c] (Grab through September 30, 2002)	Probe/recorder [c] (Recorder not necessary through September 30, 2002)
TSS (mg/L)	Monitor only	Once each three (3) months	Composite [b]
BOD_5 (mg/L)	Monitor only	Once each three (3) months	Composite [b]
Ammonia Nitrogen, (as N, mg/L)	Monitor only	Once each three (3) months	Composite [b]
pH (standard pH units)	Not outside the range 6.5 to 8.5	Once each week	Grab

[a] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass or volume, the daily discharge is calculated as the total mass or volume of the pollutant discharged over the day. For temperature, the maximum daily effluent limitation is in terms of the maximum temperature measured during a calendar day on an instantaneous basis.

[b] Daily composite samples shall consist of a minimum of four time or flow proportional grab samples collected throughout the process day from a well mixed effluent chamber.

[c] The temperature shall be measured at the industrial sewer line manhole located approximately twenty-five yards WSW of the entrance to the city of Lynden POTW. This temperature limitation is considered to be interim in the sense that the Department intends to modify the temperature limitation following completion of the Temperature Mixing Zone Study required as a condition of this permit. The Permittee is required to begin continuous monitoring for temperature with a recorder no later than October 1, 2002.

[d] The monitoring/compliance point for flow, TSS, BOD_5, ammonia, temperature, and pH shall be at a point in the cow water/non-contact cooling water discharge line prior to the introduction of non-industrial wastewater.

B. Effluent Limitations for Direct Discharge during June through September (Sample Point 002)

Beginning on the effective date of this permit and lasting through the expiration date of this permit, the Permittee is authorized during the months of June through September to discharge non-contact cooling water and uncontaminated cow water at the permitted location to the Nooksack River subject to meeting the following limitations:

	EFFLUENT LIMITATIONS	**MONITORING REQUIREMENTS[d]**	
Parameter	**Maximum Daily [a]**	**Frequency**	**Sample Type [c]**
Flow, process (mgd)	1.0	Continuously	Metered
Temperature, degrees Fahr.[c]	74	Continuously [c] (Grab through September 30, 2002)	Probe/recorder [c] (Recorder not necessary through September 30, 2002)
TSS (mg/L)	Monitor only	Once each three months	Composite [b]
BOD_5 (mg/L)	Monitor only	Once each three months	Composite [b]
Ammonia Nitrogen, (as N, mg/L)	Monitor only	Once each three months	Composite [b]
pH (standard pH units)	Not outside the range 6.5 to 8.5	Once each week	Grab

[a] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pollutants with limitations expressed in units of mass or volume, the daily discharge is calculated as the total mass or volume of the pollutant discharged over the day. For temperature, the maximum daily effluent limitation is in terms of the maximum temperature measured during a calendar day on an instantaneous basis.

[b] Daily composite samples shall consist of a minimum of four time or flow proportional grab samples collected throughout the process day from a well mixed effluent chamber.

[c] The temperature shall be measured at the industrial sewer line manhole located approximately twenty-five yards WSW of the entrance to the city of Lynden POTW. This temperature limitation is considered to be interim in the sense that the Department intends to modify the temperature limitation following completion of the Temperature Mixing Zone Study required as a condition of this permit. The Permittee is required to begin continuous monitoring for temperature with a recorder no later than October 1, 2002.

[d] The monitoring/compliance point for flow, TSS, BOD_5, ammonia, temperature, and pH shall be at a point in the cow water/non-contact cooling water discharge line prior to the introduction of non-industrial wastewater.

C. Effluent Limitations for Indirect Discharge (Sample Point 003)

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge process water at the permitted location to the City of Lynden POTW subject to meeting the following limitations:

	EFFLUENT LIMITATIONS		**MONITORING REQUIREMENTS**	
Parameter	**Maximum Daily [a]**	**Two-Day Moving Average [b]**	**Frequency**	**Sample Type [c]**
Flow, process (gpd)	N/A	226,000	Continuously	Recorder, metered
BOD_5 (pounds per day)	N/A	4,500	Daily, seven days per week	Composite [c]
TSS (pounds per day)	N/A	1,460	Daily, seven days per week	Composite [c]
pH (standard pH units) [e]	Not outside the range 6.0 to 10.0 [d]		Continuously	Recorder, metered

[a] The maximum daily effluent limitation is defined as the highest allowable daily discharge. The daily discharge means the discharge of a pollutant measured during a calendar day. For pH, the limitation is in terms of the minimum (6.0 standard pH units) and the maximum (10.0 standard pH units) pH measured each day on an instantaneous basis, with the exception that certain temporary excursions from that limit are authorized and reportable as described under footnote "d" below.

[b] The two-day average for any given day is defined as the sum of the measured value for that given day plus the measured value for the previous day, divided by two. The Permittee shall record the moving average for each day during any given month and report the maximum of such calculated averages on the monthly discharge monitoring report.

[c] Daily composite samples shall consist of a minimum of twelve time or flow proportional grab samples collected throughout the process day from a well mixed effluent chamber.

[d] Indicates the range of permitted pH values. However, when pH is continuously monitored, excursions between 3.5 and 6.0, or 10.0 and 12.0 shall not be considered violations (and need not be reported on discharge monitoring reports), provided that no single such excursion exceeds 15 minutes in length and total excursions do not exceed 7 hours and 36 minutes per month. No more than two such excursions per day shall be eligible for treatment under this exemption. In addition, no more than five such excursions, in any seven consecutive days in which operations occur, shall be eligible for treatment under this excursion. Any excursions below 3.5 standard pH units or above 12.0 standard pH units are violations, regardless of duration.

The Permittee shall maintain a pH log for any batch discharges of wastewater not routed through the continuous pretreatment system. The pH for batch discharges may be measured using pH paper or a probe and is not subject to the provision exempting certain limited duration excursions.

S2. MONITORING REQUIREMENTS

A. Monitoring Schedule

The Permittee shall monitor the effluent according to the schedule set forth in Section S1 of this permit.

B. Sampling and Analytical Procedures

Samples and measurements taken to meet the requirements of this permit shall be representative of the volume and nature of the monitored parameters, including representative sampling of any unusual discharge or discharge condition, including bypasses, upsets, and maintenance-related conditions affecting effluent quality.

Sampling and analytical methods used to meet the water and wastewater monitoring requirements specified in this permit shall conform to the latest revision of the *Guidelines Establishing Test Procedures for the Analysis of Pollutants* contained in 40 CFR Part 136 or to the latest revision of *Standard Methods for the Examination of Water and Wastewater* (APHA), unless otherwise specified in this permit or approved in writing by the Department of Ecology (Department).

C. Flow Measurement

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the quantity of monitored flows. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted industry standard for that type of device. Frequency of calibration shall be in conformance with manufacturer's recommendations and at a minimum frequency of at least one (1) calibration per year. Calibration records shall be maintained for at least three (3) years. **No later than January 15th of each year, the Permittee shall submit a certification indicating that a flow measurement calibration was performed during the previous calendar year.**

D. Laboratory Accreditation

All monitoring data required by the Department shall be prepared by a laboratory registered or accredited under the provisions of, *Accreditation of Environmental Laboratories*, Chapter 173-50 WAC. Flow, temperature, settleable solids, conductivity, pH, and internal process control parameters are exempt from this requirement.

S3. REPORTING AND RECORDKEEPING REQUIREMENTS

The Permittee shall monitor and report in accordance with the following conditions. The falsification of information submitted to the Department shall constitute a violation of the terms and conditions of this permit.

A. Reporting

The first monitoring period begins on the effective date of the permit. Monitoring results shall be submitted monthly. Monitoring data obtained during the previous month shall be summarized and reported on a form provided, or otherwise approved, by the Department, and be received no later than the 15th day of the month following the completed monitoring period, unless otherwise specified in this permit. Reports are due January 15, February 15, March 15, April 15, May 15, June 15, July 15, August 15, September 15, October 15, November 15, and December 15 of each year. The Permittee shall submit a copy of the City of Lynden spreadsheet containing flow, BOD_5 (mass and concentration basis), and TSS (mass and concentration basis) values for each day of the applicable month. The report(s) shall be sent to the Department of Ecology, Northwest Regional Office, 3190 – 160th Avenue SE, Bellevue, Washington 98008-5452. A copy of each monthly report shall, in addition, be submitted to the City of Lynden Public Works Department, 323 Front Street, Lynden, WA 98264, in accordance with the monthly schedule set forth above. The first report is due August 15, 2002.

All laboratory reports providing data for organic and metal parameters shall include the following information: sampling date, sample location, date of analysis, parameter name, CAS number, analytical method/number, method detection limit (MDL), lab practical quantitation limit (PQL), reporting units, and concentration detected.

Discharge Monitoring Report forms must be submitted monthly, whether or not the facility was discharging. If there was no discharge or the facility was not operating during a given monitoring period, the Permittee is required to submit the form as required with the words "no discharge" entered in place of the monitoring results. The Permittee is also required to submit an annual flow measurement device calibration certification on January 15th of each year.

B. Records Retention

The Permittee shall retain records of all monitoring information for a minimum of three (3) years. Such information shall include all calibration and maintenance records and all original recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit. This period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the Permittee or when requested by the Director.

C. Recording of Results

For each measurement or sample taken, the Permittee shall record the following information: (1) the date, exact place, method, and time of sampling; (2) the individual who performed the sampling or measurement; (3) the dates the analyses were performed; (4) who performed the analyses; (5) the analytical techniques or methods used; and (6) the results of all analyses.

D. Additional Monitoring by the Permittee

If the Permittee monitors any pollutant more frequently than required by this permit using test procedures specified by Condition S2 of this permit, then the results of this monitoring shall be included in the calculation and reporting of the data submitted in the Permittee's self-monitoring reports.

E. Noncompliance Notification

In the event the Permittee is unable to comply with any of the permit terms and conditions due to any cause, the Permittee shall:

1. Immediately take action to stop, contain, and cleanup unauthorized discharges or otherwise stop the violation, correct the problem, and, if applicable, repeat sampling and analysis of any violation immediately and submit the results to the Department within thirty (30) days after becoming aware of the violation;

2. Immediately notify the Department and the **City of Lynden** of the failure to comply (**and, in addition, notify the City of Lynden of the occurrence of any spill or slug loads with a potential to cause noncompliance with WestFarm Foods' NPDES permit or pass-through or interference at the City of Lynden POTW**); and

3. Submit a detailed, written report to the Department within thirty (30) days (five [5] days for upsets and bypasses), unless requested earlier by the Department. The report should describe the nature of the violation, corrective action taken and/or planned, steps to be taken to prevent a recurrence, results of the re-sampling, and any other pertinent information.

Compliance with these requirements does not relieve the Permittee from responsibility to maintain continuous compliance with the terms and conditions of this permit or the resulting liability for failure to comply.

F. Reporting - Shellfish Protection

Unauthorized direct discharges, such as collection system overflows or plant bypasses, shall be reported immediately to:

The Department of Ecology – Northwest Regional Office – (425) 649-7000

The Department of Ecology – Bellingham Field Office – (360) 676-2198

The Department of Health – Shellfish Protection – (360) 753-5992

G. Dangerous Waste Discharge Notification

The Permittee shall notify the POTW and the Department in writing of the intent to discharge into the POTW any substance designated as a dangerous waste in accordance with the provisions of WAC 173-303-070. This notification shall be made at least ninety (90) days prior to the date that discharge is proposed to be initiated.

S4. OPERATIONS AND MAINTENANCE

The Permittee shall at all times be responsible for the proper operation and maintenance of any facilities or systems of control installed to achieve compliance with the terms and conditions of the permit.

A. Operations and Maintenance Manual

The Permittee shall prepare an updated Operations and Maintenance (O&M) Manual and submit it to the Department in accordance with WAC 173-240-150 no later than November 15, 2002. The Permittee shall review the O&M Manual at least annually. Substantial changes or updates to the O&M Manual shall be submitted to the Department whenever they are incorporated into the manual within thirty (30) days of incorporation into the manual.

The approved Operations and Maintenance Manual shall be kept available at the permitted facility and all operators shall follow the instructions and procedures of this manual.

The O&M Manual shall include:

1. Emergency procedures for plant shutdown and cleanup in event of wastewater system upset or failure;

2. Plant maintenance procedures;

3. The treatment plant process control monitoring schedule;

4. A description of procedures used to meet the effluent limitations of S1 under normal operating conditions.

5. A description of operating procedures to be employed in the event of an upset, due to plant maintenance activities, severe stormwater events, start ups or shutdowns, or other causes.

7. A description of any regularly scheduled maintenance or repair activities at the facility which would affect the volume or character of the wastes discharged to the wastewater treatment system and a plan for monitoring and treating/controlling the discharge of maintenance-related materials (such as cleaners, degreasers, solvents, etc.).

The Operations and Maintenance Manual shall be kept available at the permitted facility and all operators are responsible for being familiar with, and using, this manual.

B. Bypass Procedures

The Permittee shall immediately notify the Department and City of Lynden personnel of any spill, overflow, or bypass from any portion of the collection or treatment system.

The bypass of wastes from any portion of the treatment system is prohibited unless one of the following conditions (1, 2, or 3) applies:

1. Unavoidable Bypass -- Bypass is unavoidable to prevent loss of life, personal injury, or severe property damage. "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which would cause them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass.

   If the resulting bypass from any portion of the treatment system results in noncompliance with this permit, the Permittee shall notify the Department in accordance with condition S3.E "Noncompliance Notification."

2. Anticipated Bypass that has the Potential to Violate Permit Limits or Conditions -- Bypass is authorized by an administrative order issued by the Department. The Permittee shall notify the Department at least thirty (30) days before the planned date of bypass. The notice shall contain: (1) a description of the bypass and its cause; (2) an analysis of all known alternatives which would eliminate, reduce, or mitigate the need for bypassing; (3) a cost-effectiveness analysis of alternatives including comparative resource damage assessment; (4) the minimum and maximum duration of bypass under each alternative; (5) a recommendation as to the preferred alternative for conducting the bypass; (6) the projected date of bypass initiation; (7) a statement of compliance with SEPA; (8) if a water quality criteria exceedence is unavoidable, a request for modification of Water Quality Standards as provided for in WAC 173-201A-110, and (9) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the bypass.

   For probable construction bypasses, the need to bypass is to be identified as early in the planning process as possible. The analysis required above shall be considered during preparation of the engineering report or facilities plan and plans and specifications and shall be included to the extent practical. In cases where the probable need to bypass is determined early, continued analysis is necessary up to and including the construction period in an effort to minimize or eliminate the bypass.

   The Department will consider the following prior to issuing an administrative order:

   a. If the bypass is necessary to perform construction or maintenance-related activities essential to meet the requirements of the permit.

b. If there are feasible alternatives to bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, stopping production, maintenance during normal periods of equipment down time, or transport of untreated wastes to another treatment facility.

c. If the bypass is planned and scheduled to minimize adverse effects on the public and the environment.

After consideration of the above and the adverse effects of the proposed bypass and any other relevant factors, the Department will approve or deny the request. The public shall be notified and given an opportunity to comment on bypass incidents of significant duration, to the extent feasible. Approval of a request to bypass will be by administrative order issued by the Department under RCW 90.48.120.

3. Bypass For Essential Maintenance Without the Potential to Cause Violation of Permit Limits or Conditions -- Bypass is authorized if it is for essential maintenance and does not have the potential to cause violations of limitations or other conditions of the permit, or adversely impact public health as determined by the Department prior to the bypass.

S5. DILUTION PROHIBITED

The Permittee shall not dilute the wastewater discharge with stormwater or increase the use of potable water, process water, non-contact cooling water, or, in any way, attempt to dilute an effluent as a partial or complete substitute for adequate treatment to achieve compliance with the limitations contained in this permit.

S6. SOLID WASTE DISPOSAL

A. Solid Waste Handling

The Permittee shall handle and dispose of all solid waste material in such a manner as to prevent its entry into state ground or surface water.

B. Leachate

The Permittee shall not allow leachate from its solid waste material to enter state waters without providing all known, available, and reasonable methods of treatment, nor allow such leachate to cause violations of the State Surface Water Quality Standards, Chapter 173-201A WAC, or the State Ground Water Quality Standards, Chapter 173-200 WAC. The Permittee shall apply for a permit or permit modification as may be required for such discharges to state ground or surface waters.

C. Solid Waste Plan

The Permittee shall submit an update to its solid waste plan to the Department no later than November 15, 2002. The solid waste plan update shall not be at variance with the provisions of Parts S.6.A. and S.6.B. above, or with any local requirements or approved local solid waste management plans. The Permittee shall comply with the submitted solid waste plan.

S7. PROHIBITED DISCHARGES

A. General Prohibitions

The Permittee shall not introduce into the POTW pollutant(s) which cause pass through or interference.

B. Specific Prohibitions

In addition, the following shall not be introduced into the POTW:

1. Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, waste streams with a closed cup flashpoint of less than 60^{o} C (140^{o} F) using the test methods specified in 40 CFR 261.21;

2. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in interference;

3. Any pollutant, including oxygen-demanding pollutants (BOD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;

4. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW treatment plant exceeds 40° C (104° F) unless the approval authority, upon request of the POTW, approves alternative temperature limits;

5. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;

6. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems;

7. Any trucked or hauled pollutants, except at discharge points designated by the POTW;

8. Pollutants which will cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0 or greater than 11.0, unless the works is specifically designed to accommodate such discharges.

C. Prohibited Unless Approved

1. Any of the following discharges are prohibited unless approved by the Department under extraordinary circumstances (such as a lack of direct discharge alternatives due to combined sewer service or a need to augment sewage flows due to septic conditions):

   a. Non-contact cooling water in significant volumes.

   b. Storm water and other direct inflow sources.

c. Wastewaters significantly affecting system hydraulic loading, which do not require treatment or would not be afforded a significant degree of treatment by the system.

2. Unless specifically authorized in this permit, the discharge of dangerous wastes as defined in Chapter 173-303 WAC, is prohibited.

S8. SPILL PLAN

No later than November 15, 2002, the Permittee shall submit to the Department an update of its existing spill control plan for the prevention, containment, and control of spills or unplanned releases. The Permittee shall review the plan at least annually and update the spill plan as needed. Changes to the plan shall be sent to the Department. The plan and any supplements shall be followed throughout the term of the permit.

The updated spill control plan shall include the following:

- A description of operator training to implement the plan.
- A description of the reporting system which will be used to alert responsible managers and legal authorities in the event of a spill.
- A description of preventive measures and facilities (including an overall facility plot showing drainage patterns) which prevent, contain, or treat spills of these materials.
- A list of all oil and petroleum products, materials, which when spilled, or otherwise released into the environment, are designated Dangerous Waste (DW) or Extremely Hazardous Waste (EHW) by the procedures set forth in WAC 173-303-070, or other materials which may become pollutants or cause pollution upon reaching state's waters.

Plans and manuals required by 40 CFR Part 112, contingency plans required by Chapter 173-303 WAC, or other plans required by other agencies which meet the intent of this section may be submitted.

S9. SLUG DISCHARGE CONTROL PLAN

No later than November 15, 2002, the Permittee shall prepare and submit to the Department an update of its plan to minimize the potential of slug discharges from the facility covered by this permit. The plan and any subsequent revisions shall become effective thirty (30) days following submission. Such plan shall include the following information and procedures relating to the prevention of unauthorized slug discharges:

1. A description of a reporting system to be used to immediately notify facility management, the POTW operator, and appropriate state, federal, and local authorities of any slug discharges, and provisions to provide a written follow-up report within five (5) days;

2. A description of operator training, equipment, and facilities (including overall facility plan) for preventing, containing, or treating slug discharges;

3. A list of all raw materials, products, chemicals, and hazardous materials used, processed, or stored at the facility; the normal quantity maintained on the premises for each listed material; and a map showing where they are located;

4. A description of discharge practices for batch and continuous processes under normal and non-routine circumstances;

5. A brief description of any unauthorized discharges which occurred during the thirty six (36)-month period preceding the effective date of this permit and subsequent measures taken by Permittee to prevent or to reduce the possibility of further unauthorized discharges; and

6. An implementation schedule including additional operator training and procurement and installation of equipment or facilities required to properly implement the plan.

The Permittee shall review its slug discharge plan and update it as needed but no less than once every two (2) years. All revisions or updates of this plan shall be submitted to the Department. The current approved plan shall be maintained on the plant site and be readily available to facility personnel.

S10. BEST MANAGEMENT PRACTICES

A. Best Management Practices/Pollution Prevention Program

1. Chemical Storage

Solid chemicals, chemical solutions, paints, oils, solvents, acids, caustic solutions and waste materials, including used batteries, shall be stored in a manner which will prevent the inadvertent entry of these materials into waters of the state, including ground waters, and in a manner that will prevent spillage by overfilling, tipping, or rupture. In addition, the following practices shall be used.

a. All liquid products shall be stored on durable impervious surfaces and behind berms.

b. Chemicals shall be stored and dispensed only in roofed and bermed areas to eliminate potential spills to waters of the state or contamination of stormwater runoff.

c. Any tank containing chemical solutions shall be located in a diked, or no-outlet, area that will prevent chemical loss to waters of the state or the sanitary sewer.

d. The Permittee must contain all quenching, hydraulic, machining and lubricating oils to prevent spills, or loss to waters of the state.

e. Waste liquids shall be stored under cover, such as tarpaulins or roofed structures, or in a closed vessel.

f. Incompatible or reactive materials shall be segregated and securely stored in separate containment areas that prevent the mixing of chemicals.

g. Concentrated waste or spilled chemicals shall be disposed of at a facility approved by the Department of Ecology or appropriate county health department. These materials shall not be discharged to any sewer or state water.

2. Discharge of concentrated organic solvents to the sewer system is prohibited.

3. In the event that a spill should occur within the process area, any spill control valves shall be closed to prevent the entry of concentrated chemicals, cream, milk, or milk solids to the sanitary sewers.

4. All industrial wastes containing toxic pollutants must be treated using all known available and reasonable methods for treatment prior to discharge to the sanitary sewer.

S11. RECEIVING WATER AND EFFLUENT STUDY FOR TEMPERATURE

The Permittee shall collect receiving water information necessary to determine if the direct discharge (cow water) effluent has a reasonable potential to cause a violation of the water quality standard for temperature. All sampling and analysis shall be conducted in accordance with the guidelines given in *Guidelines and Specifications for Preparing Quality Assurance Project Plans*, Ecology Publication 91-16. The Permittee shall submit a sampling and quality assurance plan for Departmental review and approval no later than March 15, 2003. The Permittee is required to conduct the Receiving Water and Effluent Study for Temperature in accordance with the sampling and quality assurance plan approved by the Department.

The Permittee shall sample and analyze the receiving water for temperature. The time of sampling shall be as close as possible to the time of the critical period. The sampling station accuracy requirements are ± 20 meters. The receiving water sampling location should be outside the zone of influence of the effluent.

Any subsequent sampling and analysis shall also meet these requirements. The Permittee may conduct a cooperative receiving water study with other NPDES permittees discharging in the same vicinity. The Permittee shall submit the results of the study to the Department no later than March 15, 2005.

To the extent to which ambient flow and temperature data are already available and sufficient for purpose of conducting the receiving water study, the Permittee may employ that data in lieu of conducting a sampling and analysis program to obtain such data.

S12. EFFLUENT MIXING STUDY FOR TEMPERATURE

A. General Requirements

The Permittee shall determine the degree of effluent and receiving water mixing which occurs within the mixing zone. The degree of mixing shall be determined during critical conditions, as defined in WAC 173-201A-020 Definitions-"Critical Condition," or as close to critical conditions as reasonably possible.

The critical condition scenarios shall be established in accordance with *Guidance for Conducting Mixing Zone Analyses* (Ecology, 1996). The dilution ratio shall be measured in the field with dye using study protocols specified in the *Guidance,* section 5.0 "Conducting a Dye Study," as well as other protocols listed in subpart C. Protocols. The use of mixing models is an acceptable alternative or adjunct to a dye study if the critical ambient conditions necessary for model input are known or will be established with field studies; and if the diffuser is visually inspected for integrity or has been recently tested for performance by the use of tracers. The *Guidance* mentioned above shall be consulted when choosing the appropriate model. The use of models is also required if critical condition scenarios that need to be examined are quite different from the set of conditions present during the dye study.

Validation (and possibly calibration) of a model may be necessary and shall be done in accordance with the *Guidance* mentioned above, in particular, subsection 5.2 "Quantify Dilution." The resultant dilution ratios for acute and chronic boundaries shall be applied in accordance with directions found in Ecology's *Permit Writer's Manual* (Ecology Publication 92-109, most current version), in particular, Chapter VI.

To the extent to which other studies exist to aid in whole or in part for the determination of the degree of the effluent and receiving water mixing for temperature, the Permittee may employ the results of or data from those studies, when technically justified for the purposes of fulfilling the requirements of this requirement.

A plan of study for the effluent mixing study for temperature shall be submitted to the Department no later than October 15, 2003.

B. Reporting Requirements

If the Permittee has information on the background physical conditions or background temperature (for which there are criteria in Chapter 173-201A WAC) in the receiving water, this information shall be submitted to the Department as part of the Effluent Mixing Report.

The results of the effluent mixing study shall be included in the Effluent Mixing Report, which shall be submitted to the Department for approval no later than March 15, 2005.

If the results of the mixing study indicate that the temperature exceeds or has a reasonable potential to exceed the State Water Quality Standards, Chapter 173-201A WAC, the Department may issue a regulatory order to require a reduction of pollutants or modify this permit to impose effluent limitations to meet the Water Quality Standards.

The Permittee shall use some method of fixing and reporting the location of the outfall and mixing zone boundaries [i.e., triangulation off the shore, microwave navigation system, or using Loran or Global Positioning System (GPS) coordinates]. The method of fixing station location and the actual station locations shall be identified in the report.

C. Protocols

The Permittee shall determine the dilution ratio using protocols outlined in the following references, approved modifications thereof, or by another method approved by the Department:

- Akar, P.J. and G.H. Jirka, *Cormix2: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Multiport Diffuser Discharges*, USEPA Environmental Research Laboratory, Athens, GA, Draft, July 1990.

- Baumgartner, D.J., W.E. Frick, P.J.W. Roberts, and C.A. Bodeen, *Dilution Models for Effluent Discharges,* USEPA, Pacific Ecosystems Branch, Newport, OR, 1993.

- Doneker, R.L. and G.H. Jirka, *Cormix1: An Expert System for Hydrodynamic Mixing Zone Analysis of Conventional and Toxic Submerged Single Port Discharges,* USEPA, Environmental Research Laboratory, Athens, GA. EPA/600-3-90/012, 1990.

- Ecology, *Permit Writer's Manual*, Water Quality Program, Department of Ecology, Olympia, WA 98504, July 1994, including most current addenda.

- Ecology, *Guidance for Conducting Mixing Zone Analyses*, Permit Writer's Manual, (Appendix 6.1), Water Quality Program, Department of Ecology, Olympia, WA 98504, October 1996.

- Kilpatrick, F.A., and E.D. Cobb, Measurement of Discharge Using Tracers, Chapter A16, *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics,* USGS, U.S. Department of the Interior, Reston, VA, 1985.

- Wilson, J.F., E.D. Cobb, and F.A. Kilpatrick, Fluorometric Procedures for Dye Tracing, Chapter A12, *Techniques of Water-Resources Investigations of the USGS, Book 3, Application of Hydraulics,* USGS, U.S. Department of the Interior. Reston, VA, 1986.

GENERAL CONDITIONS

G1. SIGNATORY REQUIREMENTS

All applications, reports, or information submitted to the Department shall be signed and certified.

A. All permit applications shall be signed by either a responsible corporate officer of at least the level of vice president of a corporation, a general partner of a partnership, or the proprietor of a sole proprietorship.

B. All reports required by this permit and other information requested by the Department shall be signed by a person described above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

1. The authorization is made in writing by a person described above and submitted to the Department, and

2. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility, such as the position of plant manager, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.)

C. Changes to authorization. If an authorization under paragraph B.2. above is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of B.2. must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

D. Certification. Any person signing a document under this section shall make the following certification:

"I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

G2. RIGHT OF ENTRY AND INSPECTION

The Permittee shall allow an authorized representative of the Department, upon the presentation of credentials and such other documents as may be required by law:

A. To enter upon the premises where a discharge is located or where any records must be kept under the terms and conditions of this permit;

B. To have access to and copy at reasonable times any records that must be kept under the terms of the permit;

C. To inspect at reasonable times any monitoring equipment or method of monitoring required in the permit;

D. To inspect at reasonable times any collection, treatment, pollution management, or discharge facilities; and

E. To sample at reasonable times any substances or parameters at any location for purposes of assuring permit compliance, or as otherwise authorized by the Clean Water Act.

G3. PERMIT ACTIONS

This permit may be modified, revoked and reissued, or terminated either at the request of any interested person (including the Permittee) or upon the Department's initiative. However, the permit may only be modified, revoked and reissued, or terminated for the reasons specified in 40 CFR 122.62, 122.64 or WAC 173-220-150 according to the procedures of 40 CFR 124.5.

A. The following are causes for terminating this permit during its term, or for denying a permit renewal application:

1. Violation of any permit term or condition.
2. Obtaining a permit by misrepresentation or failure to disclose all relevant facts.
3. A material change in quantity or type of waste disposal.
4. A determination that the permitted activity endangers human health or the environment or contributes to Water Quality Standards violations and can only be regulated to acceptable levels by permit modification or termination [40 CFR Part 122.64(3)].
5. A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit [40 CFR Part 122.64(4)].
6. Nonpayment of fees assessed pursuant to RCW 90.48.465.
7. Failure or refusal of the Permittee to allow entry as required in RCW 90.48.090.

B. The following are causes for modification but not revocation and reissuance except when the Permittee requests or agrees:

1. A material change in the condition of the waters of the state.
2. New information not available at the time of permit issuance that would have justified the application of different permit conditions.
3. Material and substantial alterations or additions to the permitted facility or activities which occurred after this permit issuance.
4. Promulgation of new or amended standards or regulations having a direct bearing upon permit conditions or requiring permit revision.
5. The Permittee has requested a modification based on other rationale meeting the criteria of 40 CFR Part 122.62.
6. The Department has determined that good cause exists for modification of a compliance schedule, and the modification will not violate statutory deadlines.
7. Incorporation of an approved local pretreatment program into a municipality's permit.

C. The following are causes for modification or alternatively revocation and reissuance:

1. Cause exists for termination for reasons listed in A1 through A7, of this section, and the Department determines that modification or revocation and reissuance is appropriate.
2. The Department has received notification of a proposed transfer of the permit. A permit may also be modified to reflect a transfer after the effective date of an automatic transfer (General Condition G8) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

G4. REPORTING A CAUSE FOR MODIFICATION

The Permittee shall submit a new application, or a supplement to the previous application, along with required engineering plans and reports, whenever a material change in the quantity or type of discharge is anticipated which is not specifically authorized by this permit. This application shall be submitted at least sixty (60) days prior to any proposed changes. Submission of this application does not relieve the Permittee of the duty to comply with the existing permit until it is modified or reissued.

G5. PLAN REVIEW REQUIRED

Prior to constructing or modifying any wastewater control facilities, an engineering report and detailed plans and specifications shall be submitted to the Department for approval in accordance with Chapter 173-240 WAC. Engineering reports, plans, and specifications should be submitted at least one hundred eighty (180) days prior to the planned start of construction. Facilities shall be constructed and operated in accordance with the approved plans.

G6. COMPLIANCE WITH OTHER LAWS AND STATUTES

Nothing in the permit shall be construed as excusing the Permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.

G7. DUTY TO REAPPLY

The Permittee must apply for permit renewal at least one hundred eighty (180) days prior to the specified expiration date of this permit.

G8. TRANSFER OF THIS PERMIT

In the event of any change in control or ownership of facilities from which the authorized discharge emanate, the Permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Department.

A. Transfers by Modification

Except as provided in paragraph B below, this permit may be transferred by the Permittee to a new owner or operator only if this permit has been modified or revoked and reissued under 40 CFR 122.62(b)(2), or a minor modification made under 40 CFR 122.63(d), to identify the new Permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

B. Automatic Transfers

This permit may be automatically transferred to a new permittee if:

1. The Permittee notifies the Department at least thirty (30) days in advance of the proposed transfer date.
2. The notice includes a written agreement between the existing and new Permittee's containing a specific date transfer of permit responsibility, coverage, and liability between them.
3. The Department does not notify the existing Permittee and the proposed new Permittee of its intent to modify or revoke and reissue this permit. A modification under the subparagraph may also be minor modification under 40 CFR 122.63. If this notice is not received, the transfer is effective on the date specified in the written agreement.

G9. REDUCED PRODUCTION FOR COMPLIANCE

The Permittee shall control production or discharge to the extent necessary to maintain compliance with the terms and conditions of this permit upon reduction of efficiency, loss, or failure of its treatment facility until the treatment capacity is restored or an alternative method of treatment is provided. This requirement applies in the situation where, among other things, the primary source of power for the treatment facility is reduced, lost, or fails.

G10. REMOVED SUBSTANCES

Collected screenings, grit, solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall not be re-suspended or reintroduced to the final effluent stream for discharge.

G11. DUTY TO PROVIDE INFORMATION

The Permittee shall submit to the Department, within a reasonable time, all information which the Department may request to determine whether cause exists for modifying, revoking, and reissuing, or terminating this permit or to determine compliance with this permit. The Permittee shall also submit to the Department upon request, copies of records required to be kept by this permit (40 CFR 122.41(h)).

G12. OTHER REQUIREMENTS OF 40 CFR

All other requirements of 40 CFR 122.41 and 122.42 are incorporated in this permit by reference.

G13. ADDITIONAL MONITORING

The Department may establish specific monitoring requirements in addition to those contained in this permit by administrative order or permit modification.

G14. PAYMENT OF FEES

The Permittee shall submit payment of fees associated with this permit as assessed by the Department. The Department may revoke this permit if the permit fees established under Chapter 173-224 WAC are not paid.

G15. PENALTIES FOR VIOLATING PERMIT CONDITIONS

Any person who is found guilty of willfully violating the terms and conditions of this permit shall be deemed guilty of a crime, and upon conviction thereof shall be punished by a fine of up to ten thousand dollars and costs of prosecution, or by imprisonment in the discretion of the court. Each day upon which a willful violation occurs may be deemed a separate and additional violation.

Any person who violates the terms and conditions of a waste discharge permit shall incur, in addition to any other penalty as provided by law, a civil penalty in the amount of up to ten thousand dollars for every such violation. Each and every such violation shall be a separate and distinct offense, and in case of a continuing violation, every day's continuance shall be and be deemed to be a separate and distinct violation.

G16. UPSET

Definition – “Upset” means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology-based permit effluent limitations if the requirements of the following paragraph are met.

A Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence that:
1) an upset occurred and that the Permittee can identify the cause(s) of the upset;
2) the permitted facility was being properly operated at the time of the upset;
3) the Permittee submitted notice of the upset as required in condition S3.E; and
4) the Permittee complied with any remedial measures required under S5 of this permit.

In any enforcement proceeding the Permittee seeking to establish the occurrence of an upset has the burden of proof.

G17. PROPERTY RIGHTS

This permit does not convey any property rights of any sort or any exclusive privilege.

G18. DUTY TO COMPLY

The Permittee shall comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

G19. TOXIC POLLUTANTS

The Permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants within the time provided in the regulations that establish those standards or prohibitions, even if this permit has not yet been modified to incorporate the requirement.

G20. PENALTIES FOR TAMPERING

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than $10,000 per violation or by imprisonment for not more than two (2) years per violation or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this condition, punishment shall be a fine of not more than $20,000 per day of violation or by imprisonment of not more than four (4) years or by both.

G21. REPORTING PLANNED CHANGES

The Permittee shall, as soon as possible, give notice to the Department of planned physical alterations or additions to the permitted facility, production increases, or process modification which will result in: 1) the permitted facility being determined to be a new source pursuant to 40 CFR 122.29(b); 2) a significant change in the nature or an increase in quantity of pollutants discharged; or 3) a significant change in the Permittee's sludge use or disposal practices. Following such notice, this permit may be modified, or revoked and reissued pursuant to 40 CFR 122.62(a) to specify and limit any pollutants not previously limited. Until such modification is effective, any new or increased discharge in excess of permit limits or not specifically authorized by this permit constitutes a violation.

G22. REPORTING ANTICIPATED NONCOMPLIANCE

The Permittee shall give advance notice to the Department by submission of a new application or supplement thereto at least one hundred and eighty (180) days prior to commencement of such discharges, of any facility expansions, production increases, or other planned changes, such as process modifications, in the permitted facility or activity which may result in noncompliance with permit limits or conditions. Any maintenance of facilities, which might necessitate unavoidable interruption of operation and degradation of effluent quality, shall be scheduled during non-critical water quality periods and carried out in a manner approved by the Department.

G23. REPORTING OTHER INFORMATION

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

G24. REPORTING REQUIREMENTS APPLICABLE TO EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURAL DISCHARGERS

The Permittee belonging to the categories of existing manufacturing, commercial, mining, or silviculture must notify the Department as soon as they know or have reason to believe:

A. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels":

1. One hundred micrograms per liter (100 μg/l).
2. Two hundred micrograms per liter (200 μg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 μg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony.
3. Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
4. The level established by the Director in accordance with 40 CFR 122.44(f).

B. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in this permit, if that discharge will exceed the highest of the following "notification levels":

1. Five hundred micrograms per liter (500 μg/L).
2. One milligram per liter (1 mg/L) for antimony.
3. Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
4. The level established by the Director in accordance with 40 CFR 122.44(f).

G25. COMPLIANCE SCHEDULES

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than fourteen (14) days following each schedule date.